

Appl. No. 10/051,968  
Supplemental Amendment Dated December 4, 2006  
Page 2 of 8

RECEIVED  
CENTRAL FAX CENTER

IN THE CLAIMS

DEC 04 2006

Please amend the following claims as indicated.

1. (Currently amended) A suspension assembly of a heavy-duty vehicle axle/suspension system, said assembly having a beam, said beam including a bushing assembly for pivotally mounting the beam on a vehicle frame via a frame hanger, wherein the improvement comprises:

a) ~~means for substantially preventing relative movement of at least one spacer disk~~  
an integral spacer apparatus, said spacer apparatus including a spacer disk and a collar, said  
spacer disk being vertically disposed between said bushing assembly and a respective one of a  
pair of spaced sidewalls of said frame hanger, said the spacer disk being formed of a generally  
rigid polymer and, said collar being disposed along at least a portion of the periphery of said  
spacer disk for engaging the bushing assembly to generally being prevented from prevent  
movement of the spacer disk relative to the said bushing assembly, whereby excessive wear to  
the said spacer disk generally is prevented.

2. (Currently amended) The improvement means of Claim 1, in which said means is  
~~an integral spacer apparatus; in which said spacer apparatus includes said spacer disk; in which~~  
~~one of said spacer apparatus is vertically disposed between each side of said bushing assembly~~  
~~and a respective one of a pair of spaced sidewalls of said frame hanger; in which at least one~~  
~~collar is formed along at least a portion of the outer periphery of said disk and extends~~  
~~perpendicularly inwardly therefrom~~ from said periphery of said disk toward its respective  
bushing assembly side; and in which a continuous groove is formed on the surface of the disk

Appl. No. 10/051,968  
Supplemental Amendment Dated December 4, 2006  
Page 3 of 8

adjacent to the bushing assembly and said collar; and in which said groove and the collar provide a complementary fit of the spacer apparatus on a mounting tube of said bushing assembly.

3. (Currently amended) The improvement means of Claim 2 1, in which a pair of collars are formed on said spacer apparatus; in which a front collar extends along about the front one-half of the spacer disk periphery; in which a top and a bottom rear end of said front collar each provide a stop against a respective one of a top and a bottom wall of said beam to prevent excessive rotation of said disk; and in which a rear collar extends along about one-half of the rear one-half of the disk periphery and is narrower than the front collar.

4. (Original) The improvement means of Claim 1, in which said spacer apparatus is formed in one piece of ultra-high molecular weight polyethylene.

5. (Withdrawn) A suspension assembly of an axle/suspension system, said assembly having a beam, said beam including a bushing assembly for pivotally mounting the beam on a vehicle frame via a frame hanger, wherein the improvement comprises:

a) means for substantially preventing direct contact between substantially non-planar bearing surfaces of said beam bushing assembly and at least one spacer disk disposed between the beam bushing assembly and said frame hanger, whereby excessive wear to the spacer disk from said direct contact generally is prevented.

Appl. No. 10/051,968

Supplemental Amendment Dated December 4, 2006

Page 4 of 8

6. (Withdrawn) The improvement means of Claim 5, in which said means is a load dissipation member vertically disposed between each side of said bushing assembly and its respective spacer disk.

7. (Withdrawn) The improvement means of Claim 6, in which said load dissipation member comprises a ring having a generally planar, vertically extending bearing surface, and a flange which extends perpendicularly in the direction of said bushing assembly for frictionally engaging a mounting tube of the bushing assembly.

8. (Withdrawn) The improvement means of Claim 7, in which said load dissipation member is a one-piece structure integrally formed of steel; in which said flange is a continuous flange formed along the inner periphery of said ring; and in which said flange engages a coped portion of the inside diameter of said mounting tube.

9. (Withdrawn) The improvement means of Claim 5, in which a plurality of load bearing surfaces are formed on each of a pair of spaced sidewalls of said beam and a mounting tube of said bushing assembly; in which each end of said mounting tube is formed with a generally vertically extending flange having substantially planar surfaces, with one of said flanges being wider than the other narrow flange; in which a portion of each of said beam sidewalls adjacent to the mounting tube is formed with an opening and a substantially planar ring surrounding said opening; in which one of said planar rings is wider than the other narrow planar ring; and in which said narrow mounting tube flange abuts the interior surface of said wide

Appl. No. 10/051,968  
Supplemental Amendment Dated December 4, 2006  
Page 5 of 8

sidewall ring and said wide mounting tube flange abuts the exterior surface of said narrow sidewall ring.

10. (Withdrawn) The improvement means of Claim 9, in which said bushing mounting tube flanges are welded to said beam sidewall rings.

11. (Previously presented) A suspension assembly of an axle/suspension system, said assembly having a beam, said beam including a bushing assembly for pivotally mounting the beam on a vehicle frame via a frame hanger, wherein the improvement comprises:

a) an integral spacer apparatus, said spacer apparatus including a spacer disk, the spacer apparatus substantially preventing movement of said spacer disk relative to said bushing assembly, said spacer apparatus being vertically disposed between each side of the bushing assembly and a respective one of a pair of spaced sidewalls of said frame hanger, front and rear collars being formed on the spacer apparatus along at least a portion of the outer periphery of the disk and extending perpendicularly inwardly therefrom toward its respective bushing assembly side, said front collar extending about a front one-half of said spacer disk periphery, a top and a bottom rear end of the front collar each providing a stop against a respective one of a top and a bottom wall of said beam to prevent excessive rotation of the disk, said rear collar extending along about one-half of a rear one-half of said disk periphery and being narrower than the front collar, a surface of the disk being formed with a continuous groove adjacent to the bushing assembly and said collars, said groove and the collars providing a complementary fit of said spacer apparatus on a mounting tube of said bushing assembly, whereby excessive wear to said spacer disk generally is prevented.

Appl. No. 10/051,968

Supplemental Amendment Dated December 4, 2006

Page 6 of 8

12. (Previously presented) A suspension assembly of an axle/suspension system, said assembly having a beam, said beam including a bushing assembly for pivotally mounting the beam on a vehicle frame via a frame hanger, wherein the improvement comprises:

a) an integral spacer apparatus, said spacer apparatus including a spacer disk, the spacer apparatus substantially preventing movement of said spacer disk relative to said bushing assembly, said spacer apparatus being vertically disposed between each side of the bushing assembly and a respective one of a pair of spaced sidewalls of said frame hanger, at least one collar being formed along at least a portion of the outer periphery of said disk and extending perpendicularly inwardly therefrom toward its respective bushing assembly side, a surface of the disk being formed with a continuous groove adjacent to the bushing assembly and said collars, said groove and the collars providing a complementary fit of said spacer apparatus on a mounting tube of said bushing assembly, whereby excessive wear to said spacer disk generally is prevented.

13. (Previously presented) The suspension assembly of an axle/suspension system of Claim 12, in which said spacer apparatus is formed in one piece of ultra-high molecular weight polyethylene.